SCORE Search Results Details for Application 10516759 and Search Result 20091123 [10100] us-10-516-759a-14 copy 24 81 rag

 Score Home
 Retrieve Application
 SCORE System
 SCORE
 Comments /

 Page
 List
 Overview
 FAQ
 Suggestions

This page gives you Search Results detail for the Application 10516759 and Search Result 20091123_110100_us-10-516-759a-14_copy_24_81.rag.

Go Back to previous page

GenCore version 6.3 Copyright (c) 1993 - 2009 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on: November 23, 2009, 11:13:51; Search time 57 Seconds

(without alignments)

960.024 Million cell updates/sec

Title: US-10-516-759A-14_COPY_24_81

Perfect score: 350

Sequence: 1 DIKHNRPRRDCVAEGKVCDP.....RNYSRGGVCVTHCNFLNGEP 58

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 5029790 seqs, 943472257 residues

Total number of hits satisfying chosen parameters: 5029790

Minimum DB seg length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: A_Geneseq_200907:*

1: geneseqp1:*
2: geneseqp2:*
3: geneseqp3:*

SUMMARIES

응

Result Query

No. Score Match Length DB ID Description

 $http://es/ScoreAccessWeb/GetItem.action? AppId=105167...10-516-759a-14_copy_24_81.rag\&ItemType=4\&startByte=0\ (1\ of\ 25)11/30/2009\ 3:01:17\ PM$

1	350	100.0	82	1	ADE36725	Ade36725	Human Erb
2	350	100.0	89	1	ADE36731	Ade36731	Human Erb
3	350	100.0	531	2	AJE77228	Aje77228	Human Erb
4	350	100.0	569	2	AOJ20844	Aoj20844	Human Erb
5	350	100.0	569	3	AUP69764	Aup69764	Human Erb
6	350	100.0	570	2	AEH24404	Aeh24404	HUMEGFRBB
7	350	100.0	621	2	AOG42613	Aog42613	Human HER
8	350	100.0	621	2	AOG42228	Aog42228	Human HER
9	350	100.0	624	2	AEH24397	Aeh24397	HUMEGFRBB
10	350	100.0	624	2	AEH24406	Aeh24406	HUMEGFRBB
11	350	100.0	625	2	ATT39332	Att39332	Human ERB
12	350	100.0	626	2	ATT39333	Att39333	Human ERB
13	350	100.0	640	1	ADE36713	Ade36713	Human Erb
14	350	100.0	640	1	ADW39268	Adw39268	Human Erb
15	350	100.0	699	2	AEH24399	Aeh24399	HUMEGFRBB
16	350	100.0	824	2	ATT39331	Att39331	Human ERB
17	350	100.0	843	2	ATT39330	Att39330	Human ERB
18	350	100.0	857	2	AOG42248	Aog42248	Human HER
19	350	100.0	866	2	AOG42602	Aog42602	Human HER
20	350	100.0	1298	2	AEK41239	Aek41239	Human tyr
21	350	100.0	1300	2	AOJ20843	Aoj20843	Human Erb
22	350	100.0	1302	2	AOJ20845	Aoj20845	Human Erb
23	350	100.0	1342	1	AAR13833	Aar13833	HER-3 epi
24	350	100.0	1342	1	AAR88453	Aar88453	erbB-3 po
25	350	100.0	1342	1	AAW69406	Aaw69406	ErbB-3 gl
26	350	100.0	1342	1	AAY16594	Aay16594	erbB-3 pr
27	350	100.0	1342	1	AAG65359	Aag65359	Human Her
28	350	100.0	1342	1	ADE62708	Ade62708	Human Pro
29	350	100.0	1342	1	ADB67646	Adb67646	Human epi
30	350	100.0	1342	1	ADB67617	Adb67617	Human epi
31	350	100.0	1342	1	ADB67645	Adb67645	Human epi
32	350	100.0	1342	1	ADB67647		Human epi
33	350	100.0	1342	1	ADB67642	Adb67642	Human epi
34	350	100.0	1342	1	ADB67644	Adb67644	Human epi
35	350	100.0	1342	1	ADB67643	Adb67643	Human epi
36	350	100.0	1342	1	ADN39920	Adn39920	Cancer/an
37	350	100.0	1342	1	ADA37256		Human Erb
38	350	100.0	1342	1	ADM10301	Adm10301	Human epi
39	350	100.0	1342	1	ADD52685	Add52685	Human erb
40	350	100.0	1342	1	ADE36712	Ade36712	Human Erb
41	350	100.0	1342	1	ADW39267		Human Erb
42	350	100.0	1342	1	ADJ66656	_	Her3 prot
43	350	100.0	1342	1	AD056208		Human Erb
44	350	100.0	1342	1	ADP54346	-	Human PRO
45	350	100.0	1342	1	ADQ19366	Adq19366	Human sof

```
RESULT 1
ADE36725
ID
     ADE36725 standard; protein; 82 AA.
XX
АC
     ADE36725;
XX
DT
     29-JAN-2004 (first entry)
XX
\mathsf{DE}
     Human ErbB-3-f12 amino acid sequence SEQ ID NO:14.
XX
     neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
KW
     human.
KW
XX
OS
     Homo sapiens.
XX
PΝ
     WO2003080835-A1.
XX
PD
     02-OCT-2003.
XX
PF
     26-MAR-2003; 2003WO-CN000217.
XX
PR
     26-MAR-2002; 2002CN-00116259.
XX
PA
     (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX
PΙ
     Zhou M;
XX
     WPI; 2003-876924/81.
DR
XX
PT
     Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
     their fragments, for treating, preventing or delaying neoplasms (e.g.
PT
     urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary
PT
PT
     or colon cancer).
XX
PS
     Claim 22; SEQ ID NO 14; 68pp; English.
XX
CC
     The present invention describes a method for treating, preventing or
     delaying neoplasm in a mammal. The method comprises administering an ErbB
CC
     -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
CC
CC
     functional fragments, where an immune response is generated against the
CC
     neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
     therapy. The method is useful for treating, preventing or delaying
CC
     neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
CC
CC
     bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
     endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
CC
CC
     tract, head and neck, heart, kidney, larynx, liver, lung, mandible,
CC
     mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
```

```
ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
CC
    rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC
    stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
CC
CC
    vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
CC
    stomach, prostate, colon and lung cancer). The present sequence
    represents a human ErbB-3 amino acid sequence, which is used in the
CC
CC
    exemplification of the present invention. N.B. The present sequence is
CC
    designated as SEQ ID NO:14 in the Sequence Listing but does not
CC
    correspond with the SEQ ID NO:14 given in figure 23.
XX
SQ
    Sequence 82 AA;
 Query Match
                         100.0%; Score 350; DB 1; Length 82;
 Best Local Similarity
                        100.0%;
                                                 0;
 Matches 58; Conservative 0; Mismatches
                                                     Indels
                                                               0; Gaps
                                                                           0;
Qу
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
             Db
          24 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 81
RESULT 2
ADE36731
ID
    ADE36731 standard; protein; 89 AA.
XX
АC
    ADE36731;
XX
    29-JAN-2004 (first entry)
DT
XX
    Human ErbB-3-f12 amino acid sequence SEQ ID NO:14.
DE
XX
    neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
ΚW
    human.
KW
XX
OS
    Homo sapiens.
XX
PΝ
    WO2003080835-A1.
XX
PD
    02-OCT-2003.
XX
    26-MAR-2003; 2003WO-CN000217.
PF
XX
    26-MAR-2002; 2002CN-00116259.
PR
XX
PA
     (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX
PΙ
    Zhou M;
XX
    WPI; 2003-876924/81.
DR
```

```
N-PSDB; ADE36730.
DR
XX
    Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
PΤ
    their fragments, for treating, preventing or delaying neoplasms (e.g.
PT
PΤ
    urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary
     or colon cancer).
PT
XX
ΡS
    Claim 22; Fig 23; 68pp; English.
XX
    The present invention describes a method for treating, preventing or
CC
    delaying neoplasm in a mammal. The method comprises administering an ErbB
CC
CC
    -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
    functional fragments, where an immune response is generated against the
CC
    neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
CC
CC
    therapy. The method is useful for treating, preventing or delaying
CC
    neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
    bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
CC
CC
    endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
CC
     tract, head and neck, heart, kidney, larynx, liver, lung, mandible,
CC
    mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
    ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
CC
CC
    rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC
     stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
CC
    vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
     stomach, prostate, colon and lung cancer). The present sequence
CC
    represents a human ErbB-3 amino acid sequence, which is used in the
CC
CC
    exemplification of the present invention. N.B. The present sequence is
CC
    designated as SEQ ID NO:14 in figure 23 but does not correspond with the
CC
     SEQ ID NO:14 given in the Sequence Listing.
XX
SO
     Sequence 89 AA;
                         100.0%; Score 350; DB 1; Length 89;
 Query Match
 Best Local Similarity
                         100.0%;
 Matches
           58; Conservative
                               0; Mismatches
                                                                            0;
                                                  0;
                                                      Indels
                                                                0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
QУ
              Db
          24 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 81
RESULT 3
AJE77228
    AJE77228 standard; protein; 531 AA.
ID
XX
АC
    AJE77228;
XX
DT
    18-OCT-2007 (first entry)
XX
```

```
Human ErbB3 tyrosine kinase receptor ectodomain protein (aa: 1-531).
DE
XX
KW
     Diagnosis; prognosis; therapeutic; cancer;
     Erbb3 tyrosine kinase receptor.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2007092932-A2.
XX
PD
     16-AUG-2007.
XX
PF
     08-FEB-2007; 2007WO-US061863.
XX
     08-FEB-2006; 2006US-0771237P.
PR
     05-OCT-2006; 2006US-0828343P.
PR
XX
PΑ
     (TARG-) TARGETED MOLECULAR DIAGNOSTICS LLC.
PA
     (YEDA ) YEDA RES & DEV CO LTD.
XX
PΙ
     Bacus SS, Hill JE, Yarden Y, Kochupurakkal BS;
XX
DR
     WPI; 2007-690352/64.
DR
     N-PSDB; AJE77227.
DR
     REFSEQ; NP 001973.
XX
     New bivalent binding molecule having binding affinity for ErbB ligand at
PT
PΤ
     separate binding sites in a single covalently joined protein molecule,
     useful for treating a disease or condition by removal or inhibition of an
PΤ
PT
     ErbB ligand.
XX
PS
     Claim 10; SEQ ID NO 6; 37pp; English.
XX
     The present invention relates to new bivalent ErbB-based ligand binding
CC
```

The present invention relates to new bivalent ErbB-based ligand binding molecules along with their method of preparation and use. The binding molecule can be a protein expressed from a recombinant DNA molecule and contain two extracellular domains of an ErbB receptor wherein both the domains bind to ErbB receptor ligands. These binding molecules act as traps to bind and sequester ligands, thus making them unavailable for binding to cellular ErbB receptors. The bivalent binding molecules and methods of the invention are useful for diagnosing and prognosing cancer and treating a disease or condition that is improved, ameliorated or inhibited by removal or inhibition of an ErbB ligand. The present sequence is human erythroblastic leukemia viral oncogene homolog 3 tyrosine kinase receptor (ErbB3 tyrosine kinase receptor; HER3) receptor ectodomain protein. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.

Sequence 531 AA;

CC CC

CC

CC

CC

CC

CC CC

CC

CC

CC

CC CC

CC

XX SQ

```
Query Match
                         100.0%; Score 350; DB 2; Length 531;
 Best Local Similarity
                         100.0%;
           58; Conservative 0; Mismatches
                                               0; Indels
                                                             0; Gaps
                                                                          0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
             Db
         464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 521
RESULT 4
AOJ20844
    AOJ20844 standard; protein; 569 AA.
ID
XX
AC
    AOJ20844;
XX
    06-MAR-2008 (first entry)
DT
XX
DE
    Human ErbB3 receptor tyrosine kinase protein SEQ:97.
XX
    splicing; gene identification signature analysis; therapeutic; diagnosis;
KW
KW
    cancer; cytostatic; inflammation; antiinflammatory; autoimmune disease;
KW
    immunosuppresive; graft rejection.
XX
OS
    Homo sapiens.
XX
    WO2005071059-A2.
PN
XX
PD
    04-AUG-2005.
XX
    27-JAN-2005; 2005WO-IL000107.
PF
XX
    27-JAN-2004; 2004US-0539128P.
PR
    15-JUN-2004; 2004US-0579202P.
PR
XX
PA
    (COMP-) COMPUGEN LTD.
XX
PΙ
    Sorek R, Pollock S, Diber A, Levine Z, Nemzer S, Kol G, Wool A;
PΙ
    Haviv A, Cohen Y, Cohen Y, Shemesh R, Savitsky K;
XX
DR
    WPI; 2005-555488/56.
XX
PΤ
    Identifying alternatively spliced exons, involves scoring each of several
    exon sequences derived from genes of species according to one or more
PT
    sequence parameters.
PT
XX
PS
    Example 3; SEQ ID NO 97; 991pp; English.
XX
CC
    The present invention relates to a novel method of identifying (M1)
```

```
CC
     alternatively spliced exons. The method comprises scoring each of several
CC
     exon sequences derived from genes of a species according to at least one
     sequence parameter, where the exon sequences of the several exon
CC
CC
     sequences scoring above a predetermined threshold represent alternatively
CC
     spliced exons, thus identifying the alternatively spliced exons. Also
     claimed are: a system (S1) for generating a database of alternatively
CC
CC
     spliced exons; predicting (M2) expression products of a gene of interest
CC
     and analyzing chromosomal location of each of the alternatively spliced
CC
     exons with respect to coding sequence of the gene of interest to thus
    predict expression products of the gene of interest. (M1) is useful for
CC
     identifying alternatively spliced exons. (S1) is useful for generating a
CC
    database of alternatively spliced exons. The DNA and the protein
CC
     sequences of the invention are useful for the diagnosis and/or treatment
CC
CC
     of the diseases like cancer, inflammatory disease, autoimmune disease,
     allergy and graft rejection. The present sequence represents a human
CC
CC
    ErbB3 receptor tyrosine kinase protein.
XX
SQ
    Sequence 569 AA;
                         100.0%; Score 350; DB 2; Length 569;
 Query Match
  Best Local Similarity
                         100.0%;
 Matches
           58; Conservative
                               0; Mismatches
                                                  0;
                                                      Indels
                                                                0;
                                                                            0;
                                                                    Gaps
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
              Db
         483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540
RESULT 5
AUP69764
    AUP69764 standard; protein; 569 AA.
ID
XX
АC
    AUP69764;
XX
DT
                 (first entry)
    19-FEB-2009
XX
DE
    Human Erbb3 tyrosine kinase receptor (delta15HER3) protein SEQ ID NO: 12.
XX
KW
    tumor marker; protein therapy; therapeutic; ovary tumor; cytostatic;
     endocrine-gen.; gynecological; uropathic; breast tumor;
KW
    hyperproliferation; cancer; lung tumor; respiratory-gen.; stomach tumor;
KW
    gastrointestinal-gen.; colon tumor; pulmonary fibrosis; antiinflammatory;
KW
    Erbb3 tyrosine kinase receptor; HER3;
KW
    human epidermal growth factor receptor 3.
KW
XX
    Homo sapiens.
OS
XX
PN
    WO2008153933-A2.
XX
```

```
PD
     18-DEC-2008.
XX
    06-JUN-2008; 2008WO-US007111.
PF
XX
     06-JUN-2007; 2007US-0942319P.
PR
     20-AUG-2007; 2007US-0956887P.
PR
XX
     (AVIB-) AVI BIOPHARMA INC.
PA
XX
PΙ
    Kole R, Sazani P, Wan J;
XX
    WPI; 2009-A43572/02.
DR
    N-PSDB; AUP69763.
DR
XX
    New soluble, human epidermal growth factor receptor-2 (HER2) splice
PT
    variant protein is HER2 antagonist, useful for the treatment of
PT
    proliferative diseases e.g. ovarian or breast cancer and pulmonary
PΤ
     fibrosis.
PΤ
XX
PS
    Disclosure; SEQ ID NO 12; 86pp; English.
XX
CC
    The present invention relates to novel isolated soluble human epidermal
CC
     growth factor receptor 2 and 3 (HER2 and HER3) proteins with HER2 and
    HER3 antagonist activity and anti-proliferative properties. The invention
CC
     further discloses (i) an isolated nucleic acid encoding HER2 but lacking
CC
    exon 15 of the normal HER2 transcript, with exon 14 joined directly to
CC
CC
    exon 16, and containing a stop codon within exon 16, (ii) a splice-
CC
     switching compound comprising an oligonucleotide between 12-30 bases and
CC
     at least 12 contiguous bases complementary to an exon-15 or 14 acceptor
     or donor splice site region contained within SEQ ID NO: 15 and (iii) a
CC
CC
    method of treating a subject having ovarian or breast cancer
CC
    characterized by over expression of human epidermal growth factor
    receptor-2 (HER2), which involves administering HER2 or the compound
CC
    comprising an oligonucleotide to the subject. The isolated soluble human
CC
CC
     epidermal growth factor receptor-2 (HER2) protein of the invention is
CC
    useful treating a subject having ovarian or breast cancer characterized
CC
    by over expression of human epidermal growth factor receptor-2 (HER2),
CC
     and proliferative diseases such as cancer (lung, gastric and colon
     cancer) and pulmonary fibrosis. The present sequence represents a human
CC
CC
    Erbb3 tyrosine kinase receptor (delta15HER3) protein.
XX
SO
     Sequence 569 AA;
 Query Match
                         100.0%; Score 350; DB 3; Length 569;
 Best Local Similarity
                         100.0%;
          58; Conservative 0; Mismatches
                                                  0;
                                                                            0;
 Matches
                                                      Indels
                                                                0;
                                                                    Gaps
Qу
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
```

```
Db
```

```
RESULT 6
AEH24404
ID
     AEH24404 standard; protein; 570 AA.
XX
АC
    AEH24404;
XX
DT
     29-JUN-2006 (first entry)
XX
\mathsf{DE}
     HUMEGFRBB3_PEA_1_P53 polypeptide.
XX
KW
     diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
     neoplasm; HUMEGFRBB3_PEA_1_P53; protein-tyrosine kinase erbB-3 precursor;
KW
     ERBB3.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2006043271-A1.
XX
PD
     27-APR-2006.
XX
PF
     16-OCT-2005; 2005WO-IL001096.
XX
PR
     22-OCT-2004; 2004US-0621004P.
     18-NOV-2004; 2004US-0628529P.
PR
XX
PA
     (COMP-) COMPUGEN LTD.
XX
     Novik A, Pollock S, Levine Z, Dahary D, Sorek R, Sella-Tavor O;
PΙ
PΙ
     Cohen-Dayag A, Sameach-Greenwald S, Walach S;
XX
DR
     WPI; 2006-331789/34.
     N-PSDB; AEH24321.
DR
XX
PΤ
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
     markers for diagnosing diseases, predicting response to treatment,
PT
PT
     monitoring treatment, or determining prognosis of a marker-detectable
PΤ
     disease.
XX
PS
     Example 5; SEQ ID NO 144; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
     HUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7
CC
CC
     comprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described
     are: an isolated polypeptide selected from HUMA1ACM_PEA 2 _ P36 (SEQ ID
CC
     NO. 51), HUMA1ACM_PEA 2 _P49 (SEQ ID NO. 52), or HUMA1ACM_PEA 2 _P59 (SEQ
CC
CC
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
```

```
HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous to SEQ ID NO.
CC
     180 or 182 of HUMAlACM_PEA 2 _P36; (b) HUMAlACM_PEA 2 _P49 comprising a
CC
    polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM_PEA 2 _P49; or
CC
     (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% homologous to SEQ ID
CC
    NO. 182 of HUMA1ACM PEA 2 P59; an isolated polypeptide encoding for a
CC
     tail of: (a) HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous
CC
CC
    to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM_PEA 2 _P49
CC
    comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA
     2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70%
CC
    homologous to SEQ ID NO. 185 or 208 in HUMA1ACM_PEA 2 _P59; a primer pair
CC
    comprising a pair of isolated oligonucleotides capable of amplifying the
CC
     amplicon; an antibody capable of specifically binding to an epitope of
CC
CC
     the amino acid sequence; a kit for detecting a marker-detectable disease
CC
     comprising a kit detecting specific expression of a splice variant; a
    biomarker capable of detecting marker-detectable disease comprising the
CC
    nucleic acid sequences or amino acid sequence, or its fragments. The
CC
CC
    polynucleotides and polypeptides are useful as diagnostic markers for
    diagnosing and screening for diseases diseases e.g., cancer, selecting a
CC
CC
     therapy for a marker-detectable disease and determining prognosis of a
CC
    marker-detectable disease, as well as for predicting response to
CC
    treatment and monitoring treatment. This sequence represents a
CC
    HUMEGFRBB3_PEA_1_P53 polypeptide, a transcript from the HUMEGFRBB3
CC
    cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as
CC
     a diagnostic marker.
XX
SQ
     Sequence 570 AA;
 Query Match
                         100.0%; Score 350; DB 2; Length 570;
 Best Local Similarity
                         100.0%;
                                                  0;
                                                                           0;
 Matches
           58; Conservative 0; Mismatches
                                                      Indels
                                                               0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
              483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540
Db
RESULT 7
AOG42613
ID
    AOG42613 standard; protein; 621 AA.
XX
АC
    AOG42613;
```

Human HER3 receptor extracellular domain (HF310) mutant protein.

Therapeutic; cancer; cytostatic; pancreas tumor; stomach tumor;

head & neck tumor; uterine cervix tumor; lung tumor; colorectal tumor; endometroid carcinoma; prostate tumor; esophagus tumor; ovary tumor;

XX DT

XX DE

XX

KW KW

KW

06-MAR-2008 (first entry)

```
uterus tumor; glioma; bladder tumor; renal tumor; breast tumor;
ΚW
     hyperproliferation; ocular disease; ophthalmological;
KW
     diabetic retinopathy; antidiabetic; psoriasis; antipsoriatic; restenosis;
KW
     vasotropic; stenosis; atherosclerosis; antiarteriosclerotic;
KW
     chronic obstructive airway disease; respiratory-gen.; inflammation;
KW
     antiinflammatory; angiogenesis disorder; antiangiogenic; gene therapy;
KW
     HER3; receptor; ErbB3; mutein.
ΚW
XX
OS
     Homo sapiens.
OS
     Synthetic.
XX
FH
     Kev
                     Location/Qualifiers
FT
     Misc-difference 541
FT
                     /note= "Wild type Gly replaced with Glu"
XX
PN
     WO2007146959-A2.
XX
PD
     21-DEC-2007.
XX
PF
     12-JUN-2007; 2007WO-US071041.
XX
     12-JUN-2006; 2006US-0813260P.
PR
PR
     29-SEP-2006; 2006US-0848542P.
PR
     05-JAN-2007; 2007US-0878941P.
XX
PA
     (RECE-) RECEPTOR BIOLOGIX INC.
XX
PΙ
     Shepard HM, Jin P, Burton LE, Bervt M;
XX
     WPI; 2008-B51284/10.
DR
XX
PT
     New multimer comprising extracellular domain ECD from HER1 receptor,
     useful for treating cancer, inflammatory disease, angiogenic disease or
PT
     hyperproliferative disease.
PT
XX
PS
     Disclosure; Page; 320pp; English.
XX
CC
     The present invention provides pan-cell surface receptor specific
CC
     therapeutics including and pan-HER (also referred to as ErbB or EGFR)
     specific therapeutics that interact with at least two different HER
CC
CC
     receptor ligands and/or dimerize with or interact with two or more HER
CC
     cell surface receptors. The invention is useful for treating cancer such
CC
     as pancreatic, gastric, head and neck, cervical, lung, colorectal,
     endometrial, prostate, esophageal, ovarian, uterine, glioma, bladder,
CC
     renal and breast cancer, proliferative diseases such as proliferation
CC
CC
     and/or migration of smooth muscle cells, disease of the anterior eye,
CC
     diabetic retinopathy, psoriasis, restenosis, ophthalmic disorders,
```

CC CC stenosis, atherosclerosis, hypertension from thickening of blood vessels,

bladder diseases and obstructive airway diseases, inflammatory disease

```
and angiogenic disease. The invention is also useful in gene therapy. The
CC
    present sequence is human HER3 receptor (ErbB3) extracellular domain
CC
CC
    mutant protein. Note: This sequence is not shown in the specification,
    but is derived from human HER3 receptor ECD protein shown as SEQ ID NO:
CC
CC
    26 in sequence listing of the specification.
XX
SQ
    Sequence 621 AA;
                         100.0%; Score 350; DB 2; Length 621;
 Query Match
 Best Local Similarity
                         100.0%;
 Matches 58; Conservative 0; Mismatches 0;
                                                     Indels
                                                               0; Gaps
                                                                           0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
             Db
         464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 521
RESULT 8
AOG42228
    AOG42228 standard; protein; 621 AA.
ID
XX
АC
    AOG42228;
XX
DT
    06-MAR-2008 (first entry)
XX
DE
    Human HER3 receptor extracellular domain protein, HF310.
XX
    Therapeutic; cancer; cytostatic; pancreas tumor; stomach tumor;
KW
    head & neck tumor; uterine cervix tumor; lung tumor; colorectal tumor;
ΚW
    endometroid carcinoma; prostate tumor; esophagus tumor; ovary tumor;
KW
    uterus tumor; glioma; bladder tumor; renal tumor; breast tumor;
KW
    hyperproliferation; ocular disease; ophthalmological;
ΚW
    diabetic retinopathy; antidiabetic; psoriasis; antipsoriatic; restenosis;
ΚW
    vasotropic; stenosis; atherosclerosis; antiarteriosclerotic;
KW
    chronic obstructive airway disease; respiratory-gen.; inflammation;
KW
    antiinflammatory; angiogenesis disorder; antiangiogenic; gene therapy;
KW
    HER3; receptor; ErbB3.
KW
XX
OS
    Homo sapiens.
XX
FΗ
                    Location/Qualifiers
    Key
    Misc-difference 541
FT
FΤ
                    /note= "Encoded by GAG"
XX
PN
    WO2007146959-A2.
XX
PD
    21-DEC-2007.
XX
PF
    12-JUN-2007; 2007WO-US071041.
```

```
XX
    12-JUN-2006; 2006US-0813260P.
PR
     29-SEP-2006; 2006US-0848542P.
PR
     05-JAN-2007; 2007US-0878941P.
PR
XX
PΑ
     (RECE-) RECEPTOR BIOLOGIX INC.
XX
PΙ
     Shepard HM,
                 Jin P, Burton LE,
                                     Beryt M;
XX
DR
    WPI; 2008-B51284/10.
    N-PSDB; AOG42227.
DR
XX
PΤ
    New multimer comprising extracellular domain ECD from HER1 receptor,
    useful for treating cancer, inflammatory disease, angiogenic disease or
PT
    hyperproliferative disease.
PT
XX
PS
    Claim 95; SEQ ID NO 26; 320pp; English.
XX
CC
    The present invention provides pan-cell surface receptor specific
CC
     therapeutics including and pan-HER (also referred to as ErbB or EGFR)
CC
     specific therapeutics that interact with at least two different HER
CC
    receptor ligands and/or dimerize with or interact with two or more HER
CC
    cell surface receptors. The invention is useful for treating cancer such
CC
    as pancreatic, gastric, head and neck, cervical, lung, colorectal,
     endometrial, prostate, esophageal, ovarian, uterine, glioma, bladder,
CC
    renal and breast cancer, proliferative diseases such as proliferation
CC
CC
    and/or migration of smooth muscle cells, disease of the anterior eye,
CC
    diabetic retinopathy, psoriasis, restenosis, ophthalmic disorders,
CC
     stenosis, atherosclerosis, hypertension from thickening of blood vessels,
    bladder diseases and obstructive airway diseases, inflammatory disease
CC
CC
     and angiogenic disease. The invention is also useful in gene therapy. The
CC
    present sequence is human HER3 receptor (ErbB3) extracellular domain
CC
    protein.
XX
SQ
     Sequence 621 AA;
 Query Match
                         100.0%; Score 350; DB 2; Length 621;
  Best Local Similarity
                         100.0%;
 Matches
           58; Conservative
                                0; Mismatches
                                                  0;
                                                      Indels
                                                                0;
                                                                   Gaps
                                                                           0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
             Db
         464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 521
RESULT 9
AEH24397
```

AEH24397 standard; protein; 624 AA.

ID

XX

```
AEH24397;
AC
XX
DT
     29-JUN-2006 (first entry)
XX
DE
     HUMEGFRBB3 PEA 1 P15 polypeptide.
XX
KW
     diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
     neoplasm; HUMEGFRBB3_PEA_1_P15; protein-tyrosine kinase erbB-3 precursor;
KW
     ERBB3.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2006043271-A1.
XX
     27-APR-2006.
PD
XX
PF
     16-OCT-2005; 2005WO-IL001096.
XX
PR
     22-OCT-2004; 2004US-0621004P.
PR
     18-NOV-2004; 2004US-0628529P.
XX
PΑ
     (COMP-) COMPUGEN LTD.
XX
PΙ
     Novik A, Pollock S, Levine Z, Dahary D, Sorek R, Sella-Tavor O;
PΙ
     Cohen-Dayag A, Sameach-Greenwald S, Walach S;
XX
     WPI; 2006-331789/34.
DR
     N-PSDB; AEH24320.
DR
XX
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
PΤ
     markers for diagnosing diseases, predicting response to treatment,
PΤ
PT
     monitoring treatment, or determining prognosis of a marker-detectable
PΤ
     disease.
XX
PS
     Example 5; SEQ ID NO 137; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
CC
     HUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7
     comprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described
CC
     are: an isolated polypeptide selected from HUMA1ACM_PEA 2 _P36 (SEQ ID
CC
     NO. 51), HUMA1ACM_PEA 2 _P49 (SEQ ID NO. 52), or HUMA1ACM_PEA 2 _P59 (SEQ
CC
CC
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
CC
     HUMA1ACM PEA 2 P36 comprising a polypeptide 70% homologous to SEQ ID NO.
     180 or 182 of HUMAlacm PEA 2 P36; (b) HUMAlacm PEA 2 P49 comprising a
CC
     polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM_PEA 2 _P49; or
CC
CC
     (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% homologous to SEQ ID
     NO. 182 of HUMA1ACM PEA 2 P59; an isolated polypeptide encoding for a
CC
     tail of: (a) HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous
CC
CC
     to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM_PEA 2 _P49
```

```
CC
    comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA
     2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70%
CC
    homologous to SEQ ID NO. 185 or 208 in HUMA1ACM_PEA 2 _P59; a primer pair
CC
CC
    comprising a pair of isolated oligonucleotides capable of amplifying the
CC
     amplicon; an antibody capable of specifically binding to an epitope of
     the amino acid sequence; a kit for detecting a marker-detectable disease
CC
CC
    comprising a kit detecting specific expression of a splice variant; a
CC
    biomarker capable of detecting marker-detectable disease comprising the
CC
    nucleic acid sequences or amino acid sequence, or its fragments. The
    polynucleotides and polypeptides are useful as diagnostic markers for
CC
    diagnosing and screening for diseases diseases e.g., cancer, selecting a
CC
CC
    therapy for a marker-detectable disease and determining prognosis of a
    marker-detectable disease, as well as for predicting response to
CC
CC
     treatment and monitoring treatment. This sequence represents a
    HUMEGFRBB3_PEA_1_P15 polypeptide, a transcript from the HUMEGFRBB3
CC
    cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as
CC
CC
     a diagnostic marker.
XX
SQ
     Sequence 624 AA;
 Query Match
                         100.0%; Score 350; DB 2; Length 624;
 Best Local Similarity
                         100.0%;
 Matches
           58; Conservative 0; Mismatches
                                                  0;
                                                      Indels
                                                               0;
                                                                   Gaps
                                                                           0;
Qу
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
             Db
         483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540
RESULT 10
AEH24406
    AEH24406 standard; protein; 624 AA.
ID
XX
АC
    AEH24406;
XX
DT
    29-JUN-2006 (first entry)
XX
DE
    HUMEGFRBB3_PEA_1_P55 polypeptide.
XX
    diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
KW
    neoplasm; HUMEGFRBB3_PEA_1_P55; protein-tyrosine kinase erbB-3 precursor;
KW
    ERBB3.
KW
XX
OS
    Homo sapiens.
XX
PN
    WO2006043271-A1.
XX
PD
     27-APR-2006.
XX
```

```
XX

PR 22-OCT-2004; 2004US-0621004P.

PR 18-NOV-2004; 2004US-0628529P.

XX

PA (COMP-) COMPUGEN LTD.

XX
```

16-OCT-2005; 2005WO-IL001096.

PI Novik A, Pollock S, Levine Z, Dahary D, Sorek R, Sella-Tavor O; PI Cohen-Dayag A, Sameach-Greenwald S, Walach S;

DR WPI; 2006-331789/34. DR N-PSDB; AEH24323.

PF

XX

XX

XX

PT New isolated polynucleotide and polypeptide markers, useful as diagnostic PT markers for diagnosing diseases, predicting response to treatment, PT monitoring treatment, or determining prognosis of a marker-detectable PT disease.

PS Example 5; SEQ ID NO 146; 421pp; English.

XX CC The invention describes an isolated polynucleotide comprising CCHUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7 CCcomprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described are: an isolated polypeptide selected from HUMA1ACM PEA 2 P36 (SEQ ID CC NO. 51), HUMA1ACM PEA 2 P49 (SEQ ID NO. 52), or HUMA1ACM PEA 2 P59 (SEQ CC ID NO. 53); an isolated polypeptide encoding for a head of: (a) CC CC HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous to SEQ ID NO. 180 or 182 of HUMALACM_PEA 2 _P36; (b) HUMALACM_PEA 2 _P49 comprising a CC CC polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM_PEA 2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% homologous to SEQ ID CC NO. 182 of HUMA1ACM_PEA 2 _P59; an isolated polypeptide encoding for a CC CC tail of: (a) HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM_PEA 2 _P49 CC comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA CC 2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70% CC CC homologous to SEQ ID NO. 185 or 208 in HUMA1ACM_PEA 2 _P59; a primer pair CC comprising a pair of isolated oligonucleotides capable of amplifying the CC amplicon; an antibody capable of specifically binding to an epitope of CCthe amino acid sequence; a kit for detecting a marker-detectable disease CC comprising a kit detecting specific expression of a splice variant; a CC biomarker capable of detecting marker-detectable disease comprising the CC nucleic acid sequences or amino acid sequence, or its fragments. The CC polynucleotides and polypeptides are useful as diagnostic markers for diagnosing and screening for diseases diseases e.g., cancer, selecting a CC therapy for a marker-detectable disease and determining prognosis of a CC CC marker-detectable disease, as well as for predicting response to CC treatment and monitoring treatment. This sequence represents a CC HUMEGFRBB3_PEA_1_P55 polypeptide, a transcript from the HUMEGFRBB3 CC cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as

```
SCORE Search Results Details for Application 10516759 and Search Result 20091123_110100_us-10-516-759a-14_copy_24_81.rag.
CC
     a diagnostic marker.
XX
SO
     Sequence 624 AA;
                          100.0%; Score 350; DB 2; Length 624;
 Query Match
 Best Local Similarity
                          100.0%;
 Matches
          58; Conservative 0; Mismatches
                                                   0;
                                                                              0;
                                                        Indels
                                                                  0;
                                                                      Gaps
            1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
              Db
          483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540
RESULT 11
ATT39332
    ATT39332 standard; protein; 625 AA.
ID
XX
AC
    ATT39332;
XX
DT
     08-JAN-2009 (first entry)
XX
DE
     Human ERBB3-intein fusion protein SEQ ID 193.
XX
KW
     protein production; chimeric protein; nanotechnology;
     antibody engineering; antibody production; gene regulation;
KW
     antibody therapy; therapeutic; cancer; metastasis; non-hodgkin lymphoma;
KW
     asthma; rheumatoid arthritis; psoriatic arthritis;
KW
     ankylosing spondylitis; Crohns disease; colorectal tumor;
KW
     autoimmune disease; antiallergic; antiarthritic; antiasthmatic;
ΚW
     antiinflammatory; cytostatic; gastrointestinal-gen.; hematological-gen.;
KW
     immunomodulator; immunosuppressive; musculoskeletal-gen.;
KW
     respiratory-gen.; Erbb3 tyrosine kinase receptor; intein; fusion protein.
ΚW
XX
OS
     Homo sapiens.
     Synthetic.
OS
XX
PΝ
     US2008254512-A1.
XX
PD
     16-OCT-2008.
XX
PF
     31-OCT-2007; 2007US-00982085.
XX
     02-NOV-2006; 2006US-0856864P.
PR
XX
PA
     (CAPO/) CAPON D J.
```

XX PI

XX

DR

Capon DJ;

WPI: 2008-015609/82.

```
XX
PΤ
    New compound that comprises an independently folding protein domain fused
     to a second independently folding protein domain by non-peptide bond for
PΤ
     treating e.g. cancer, metastatic disease, asthma, rheumatoid arthritis
PT
PT
     and autoimmune disease.
XX
PS
    Example 9; SEQ ID NO 193; 363pp; English.
XX
CC
     The present invention relates to a novel compound comprising an
     independently folding protein domain fused to a second independently
CC
CC
     folding protein domain by a non-peptide bond around which dihedral
CC
     rotation may occur. The invention, in particular, relates to hybrid
CC
     immunoglobulins containing moving parts, related compositions, methods of
     use, methods of production of such hybrid immunoglobulins; and to
CC
CC
     analogous genetic devices, preferably nanodevices. The protein-like
CC
     compounds (preferably immunoglobulins) and their dimers and multimers are
    useful for affecting the activity of a target, e.g. epidermal growth
CC
CC
     factor (EGF) receptor, human epidermal growth factor receptor 2 (HER2),
CC
     vascular endothelial growth factor (VEGF) receptor (e.g. VEGFR1, VEGFR6,
CC
     and VEGFR3), CD20 antigen, CD11a leukocyte receptor, IgE immunoglobulin,
    glycoprotein IIa receptor, glycoprotein IIIa receptor, tumor necrosis
CC
CC
     factor (TNF) alpha (e.g. TNFRSF1a, and TNFRSF1b), or TNF receptor, gap
CC
    protein 120 (gp120), human Erb1 (proto-oncogene), Erb2, Erb6, Erb3 and
CC
    Erb4; useful for treating e.g. cancer, metastatic disease, B-cell non-
    Hodgkin's lymphoma, asthma, a subject having a skin test positive for
CC
    perennial aerocollagen, rheumatoid arthritis, psoriatic arthritis,
CC
CC
     ankylosing spondylitis, Crohn's disease, fustulizing disease, metastatic
CC
     colorectal carcinoma, as an adjunct to percutaneous coronary
CC
     intervention, and autoimmune diseases. The present sequence represents a
     fusion protein comprising the human Erbb3 tyrosine kinase receptor fused
CC
    with the human intein polypeptide which was useful during the method of
CC
CC
     the invention for the production of hybrid immunoglobulins.
XX
SO
     Sequence 625 AA;
                         100.0%; Score 350; DB 2; Length 625;
 Query Match
 Best Local Similarity
                         100.0%;
 Matches
           58; Conservative
                                0; Mismatches
                                                  0;
                                                      Indels
                                                                0;
                                                                    Gaps
                                                                            0;
            1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGOCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
              464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 521
Db
RESULT 12
ATT39333
    ATT39333 standard; protein; 626 AA.
ID
XX
```

АC

ATT39333;

XX

```
DT
     08-JAN-2009
                  (first entry)
XX
     Human ERBB3-intein fusion protein SEQ ID 194.
DE
XX
KW
     protein production; chimeric protein; nanotechnology;
KW
     antibody engineering; antibody production; gene regulation;
     antibody therapy; therapeutic; cancer; metastasis; non-hodgkin lymphoma;
KW
     asthma; rheumatoid arthritis; psoriatic arthritis;
KW
     ankylosing spondylitis; Crohns disease; colorectal tumor;
KW
     autoimmune disease; antiallergic; antiarthritic; antiasthmatic;
KW
     antiinflammatory; cytostatic; gastrointestinal-gen.; hematological-gen.;
KW
     immunomodulator; immunosuppressive; musculoskeletal-gen.;
KW
     respiratory-gen.; Erbb3 tyrosine kinase receptor; intein; fusion protein.
KW
XX
OS
     Homo sapiens.
     Synthetic.
OS
XX
ΡN
     US2008254512-A1.
XX
PD
     16-OCT-2008.
XX
PF
     31-OCT-2007; 2007US-00982085.
XX
PR
     02-NOV-2006; 2006US-0856864P.
XX
     (CAPO/) CAPON D J.
PA
XX
PΙ
     Capon DJ;
XX
     WPI; 2008-015609/82.
DR
XX
PΤ
     New compound that comprises an independently folding protein domain fused
     to a second independently folding protein domain by non-peptide bond for
PT
PΤ
     treating e.g. cancer, metastatic disease, asthma, rheumatoid arthritis
PT
     and autoimmune disease.
XX
ΡS
     Example 9; SEQ ID NO 194; 363pp; English.
XX
CC
     The present invention relates to a novel compound comprising an
CC
     independently folding protein domain fused to a second independently
     folding protein domain by a non-peptide bond around which dihedral
CC
CC
     rotation may occur. The invention, in particular, relates to hybrid
     immunoglobulins containing moving parts, related compositions, methods of
CC
     use, methods of production of such hybrid immunoglobulins; and to
CC
CC
     analogous genetic devices, preferably nanodevices. The protein-like
CC
     compounds (preferably immunoglobulins) and their dimers and multimers are
     useful for affecting the activity of a target, e.g. epidermal growth
CC
CC
     factor (EGF) receptor, human epidermal growth factor receptor 2 (HER2),
```

```
CC
    vascular endothelial growth factor (VEGF) receptor (e.g. VEGFR1, VEGFR6,
    and VEGFR3), CD20 antigen, CD11a leukocyte receptor, IgE immunoglobulin,
CC
    glycoprotein IIa receptor, glycoprotein IIIa receptor, tumor necrosis
CC
CC
    factor (TNF) alpha (e.g. TNFRSF1a, and TNFRSF1b), or TNF receptor, gap
CC
    protein 120 (qp120), human Erb1 (proto-oncogene), Erb2, Erb6, Erb3 and
    Erb4; useful for treating e.g. cancer, metastatic disease, B-cell non-
CC
CC
    Hodgkin's lymphoma, asthma, a subject having a skin test positive for
CC
    perennial aerocollagen, rheumatoid arthritis, psoriatic arthritis,
CC
    ankylosing spondylitis, Crohn's disease, fustulizing disease, metastatic
CC
    colorectal carcinoma, as an adjunct to percutaneous coronary
    intervention, and autoimmune diseases. The present sequence represents a
CC
    fusion protein comprising the human Erbb3 tyrosine kinase receptor fused
CC
    with the human intein polypeptide which was useful during the method of
CC
    the invention for the production of hybrid immunoglobulins.
CC
XX
SQ
    Sequence 626 AA;
 Query Match
                         100.0%; Score 350; DB 2; Length 626;
                        100.0%;
 Best Local Similarity
 Matches 58; Conservative 0; Mismatches
                                                 0;
                                                     Indels
                                                               0;
                                                                           0;
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
Qу
             Db
         464 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 521
RESULT 13
ADE36713
    ADE36713 standard; protein; 640 AA.
ID
XX
АC
    ADE36713;
XX
    29-JAN-2004 (first entry)
DT
XX
    Human ErbB-3 partial amino acid sequence SEQ ID NO:2.
DE
XX
KW
    neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
KW
    human.
XX
OS
    Homo sapiens.
XX
PN
    WO2003080835-A1.
XX
PD
    02-OCT-2003.
XX
PF
    26-MAR-2003; 2003WO-CN000217.
XX
PR
    26-MAR-2002; 2002CN-00116259.
XX
```

```
(ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
PA
XX
PΙ
     Zhou M;
XX
DR
    WPI; 2003-876924/81.
XX
PT
    Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
    their fragments, for treating, preventing or delaying neoplasms (e.g.
PT
PΤ
    urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary
PT
     or colon cancer).
XX
PS
    Claim 22; SEQ ID NO 2; 68pp; English.
XX
CC
    The present invention describes a method for treating, preventing or
    delaying neoplasm in a mammal. The method comprises administering an ErbB
CC
     -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
CC
CC
     functional fragments, where an immune response is generated against the
CC
    neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
CC
     therapy. The method is useful for treating, preventing or delaying
CC
    neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
CC
    bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
CC
    endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
CC
    tract, head and neck, heart, kidney, larynx, liver, lung, mandible,
CC
    mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
    ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
CC
    rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC
CC
     stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
CC
    vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
CC
     stomach, prostate, colon and lung cancer). The present sequence
    represents a human ErbB-3 amino acid sequence, which is used in the
CC
CC
     exemplification of the present invention.
XX
SO
     Sequence 640 AA;
 Query Match
                         100.0%; Score 350; DB 1; Length 640;
 Best Local Similarity
                         100.0%;
 Matches 58; Conservative 0; Mismatches
                                                0;
                                                      Indels
                                                               0;
                                                                   Gaps
                                                                           0;
Qу
           1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
              Db
         483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540
RESULT 14
ADW39268
    ADW39268 standard; protein; 640 AA.
ID
XX
АC
    ADW39268;
XX
```

```
RESULT 15
AEH24399
ID AEH24399 standard; protein; 699 AA.
XX
AC AEH24399;
XX
```

```
29-JUN-2006 (first entry)
DT
XX
\mathsf{DE}
     HUMEGFRBB3_PEA_1_P31 polypeptide.
XX
     diagnostic; prognosis; genetic marker; screening; cancer; cytostatic;
KW
     neoplasm; HUMEGFRBB3_PEA_1_P31; protein-tyrosine kinase erbB-3 precursor;
KW
KW
     ERBB3.
XX
     Homo sapiens.
OS
XX
PN
     WO2006043271-A1.
XX
PD
     27-APR-2006.
XX
PF
     16-OCT-2005; 2005WO-IL001096.
XX
PR
     22-OCT-2004; 2004US-0621004P.
     18-NOV-2004; 2004US-0628529P.
PR
XX
PΑ
     (COMP-) COMPUGEN LTD.
XX
PΙ
     Novik A, Pollock S, Levine Z, Dahary D, Sorek R, Sella-Tavor O;
PΙ
     Cohen-Dayag A, Sameach-Greenwald S, Walach S;
XX
DR
     WPI: 2006-331789/34.
    N-PSDB; AEH24326.
DR
XX
     New isolated polynucleotide and polypeptide markers, useful as diagnostic
PΤ
PT
     markers for diagnosing diseases, predicting response to treatment,
     monitoring treatment, or determining prognosis of a marker-detectable
PT
PΤ
     disease.
XX
PS
     Example 5; SEQ ID NO 139; 421pp; English.
XX
CC
     The invention describes an isolated polynucleotide comprising
CC
     HUMA1ACM_PEA 2 _T21, HUMA1ACM_PEA 2 _T27, or HUMA1ACM_PEA 2 _T7
CC
     comprising 1320, 1239, or 2713 bp (SEQ ID NO. 1, 2, or 3). Also described
CC
     are: an isolated polypeptide selected from HUMA1ACM_PEA 2 _P36 (SEQ ID
     NO. 51), HUMA1ACM_PEA 2 _P49 (SEQ ID NO. 52), or HUMA1ACM_PEA 2 _P59 (SEQ
CC
     ID NO. 53); an isolated polypeptide encoding for a head of: (a)
CC
     HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous to SEQ ID NO.
CC
CC
     180 or 182 of HUMALACM_PEA 2 _P36; (b) HUMALACM_PEA 2 _P49 comprising a
     polypeptide 70% homologous to SEQ ID NO. 182 of HUMA1ACM PEA 2 P49; or
CC
     (c) HUMA1ACM PEA 2 P59 comprising a polypeptide 70% homologous to SEQ ID
CC
     NO. 182 of HUMA1ACM_PEA 2 _P59; an isolated polypeptide encoding for a
CC
CC
     tail of: (a) HUMA1ACM_PEA 2 _P36 comprising a polypeptide 70% homologous
     to SEQ ID NO. 181 in HUMA1ACM_PEA 2 _P36; (b) HUMA1ACM_PEA 2 _P49
CC
CC
     comprising a polypeptide 70% homologous to SEQ ID NO. 183 in HUMALACM_PEA
CC
     2 _P49; or (c) HUMA1ACM_PEA 2 _P59 comprising a polypeptide 70%
```

CC homologous to SEQ ID NO. 185 or 208 in HUMA1ACM_PEA 2 _P59; a primer pair CC comprising a pair of isolated oligonucleotides capable of amplifying the amplicon; an antibody capable of specifically binding to an epitope of CC CC the amino acid sequence; a kit for detecting a marker-detectable disease CC comprising a kit detecting specific expression of a splice variant; a biomarker capable of detecting marker-detectable disease comprising the CC CC nucleic acid sequences or amino acid sequence, or its fragments. The CC polynucleotides and polypeptides are useful as diagnostic markers for CC diagnosing and screening for diseases diseases e.g., cancer, selecting a therapy for a marker-detectable disease and determining prognosis of a CC marker-detectable disease, as well as for predicting response to CCtreatment and monitoring treatment. This sequence represents a CC CC HUMEGFRBB3_PEA_1_P31 polypeptide, a transcript from the HUMEGFRBB3 CC cluster and variant of protein-tyrosine kinase erbB-3 precursor useful as a diagnostic marker. CC XX

SQ Sequence 699 AA;

```
Query Match 100.0%; Score 350; DB 2; Length 699;
Best Local Similarity 100.0%;
Matches 58; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 58
```

Db 483 DIKHNRPRRDCVAEGKVCDPLCSSGGCWGPGPGQCLSCRNYSRGGVCVTHCNFLNGEP 540

Search completed: November 23, 2009, 11:14:49

Job time : 58 secs